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(54) **METHOD AND APPARATUS FOR SENSORY STIMULATION**

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See application file for complete search history.

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(57) **ABSTRACT**

An apparatus for producing an electrosensory sensation to a body member (120). The apparatus comprises one or more conducting electrodes (106), each of which is provided with an insulator (108). When the body member (120) is proximate to the conducting electrode, the insulator prevents flow of direct current from the conducting electrode to the body member. A capacitive coupling over the insulator (108) is formed between the conducting electrode (106) and the body member (120). The conducting electrodes are driven by an electrical input which comprises a low-frequency component (114) in a frequency range between 10 Hz and 500 Hz. The capacitive coupling and electrical input are dimensioned to produce an electrosensory sensation. The apparatus is capable of producing the electrosensory sensation independently of any mechanical vibration of the one or more conducting electrodes (106) or insulators (108).

21 Claims, 8 Drawing Sheets

